

1637

**TRANSMITTAL LETTER**  
**(General - Patent Pending)**

Docket No.  
P-457(TI-0018)

In Re Application Of: Gjerde et al.

**RECEIVED**

SEP 15 2003

Serial No.  
09/826,055

Filing Date  
April 3, 2001

Examiner  
Siew, Jeffrey

Group Art Unit  
TECH CENTER  
1637 1600/2800

Title: **Modifying Double Stranded DNA to Enhance Separations by Matched ION Polynucleotide Chromatography**

TO THE COMMISSIONER FOR PATENTS:

Transmitted herewith is:

**Power of Attorney with Revocation  
Certificate under 37 CFR 3.73(b)**

in the above identified application.

- ☒ No additional fee is required.
- ☐ A check in the amount of \_\_\_\_\_ is attached.
- ☒ The Director is hereby authorized to charge and credit Deposit Account No. **50-1619** as described below.
- ☐ Charge the amount of \_\_\_\_\_
- ☒ Credit any overpayment.
- ☒ Charge any additional fee required.

*Jane Massey Licata*

Signature

Dated: **September 8, 2003**

**Jane Massey Licata, Reg. No. 32,257**

**LICATA & TYRRELL P.C.**  
**66 East Main Street**  
**Marlton, New Jersey 08053**  
**Tel : 856-810-1515**  
**Fax: 856-810-1454**

I certify that this document and fee is being deposited on \_\_\_\_\_ with the U.S. Postal Service as first class mail under 37 C.F.R. 1.8 and is addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Signature of Person Mailing Correspondence

Typed or Printed Name of Person Mailing Correspondence

CC:



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Attorney Docket No.: P-457 (TI-0018)  
Inventors: Gjerde et al.  
Serial No.: 09/826,055  
Filing Date: April 3, 2001  
Examiner: Not Yet Assigned  
Group Art Unit: Not Yet Assigned  
Title: Modifying Double Stranded DNA to Enhance Separations by Matched ION Polynucleotide Chromatography

RECEIVED

SEP 15 2003

TECH CENTER 1600/2000

Mail Stop  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

POWER OF ATTORNEY WITH REVOCATION

Revoking any and all powers of attorney heretofore given in the matter of the above-entitled application, the undersigned, assignee of the entire interest in the above-identified application, hereby appoints Keith A. Johnson, Registration No. 53,079 of Omaha, Nebraska and Licata & Tyrrell P.C., Jane Massey Licata, Registration No. 32,257, Kathleen A. Tyrrell, Registration No. 38,350, Laura Plunkett, Registration No. 45,015, and, Bridget C. Sciamanna, Registration No. 47,333, of Marlton, New Jersey, as attorney, with full power of substitution and revocation, to prosecute this application, to make alterations and amendments therein, to receive the patent, and to transact all business in the Patent and Trademark Office connected therewith.

Send all future correspondence and address all telephone calls  
to:

Jane Massey Licata, Esquire  
Licata & Tyrrell P.C.  
66 E. Main Street  
Marlton, New Jersey 08053  
Phone: (856) 810-1515  
Fax: (856) 810-1454

Respectfully submitted,

\_\_\_\_\_  
Name:  
Title:

Date: July 29, 2003

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Attorney Docket No. P-457 (TI-0018)  
Inventors: Gjerde et al.  
Serial No.: 09/826,055  
Filing Date: April 3, 2001  
Examiner: Not Yet Assigned  
Group Art Unit: Not Yet Assigned  
Title: Modifying Double Stranded DNA to Enhance  
Separations by Matched ION Polynucleotide  
Chromatography



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SEP 15 2003

TECH CENTER 1800/200

CERTIFICATE UNDER 37 CFR 3.73(b)

Transgenomic, Inc., a corporation certifies that it is the assignee of the entire right, title and interest in the patent application identified above by virtue of an assignment from the inventor(s) of the patent application identified above. The assignment is attached.

The undersigned has reviewed all the documents in the chain of title of the patent application identified above and, to the best of the undersigned's knowledge and belief, title is in the assignee identified above.

The undersigned (whose title is supplied below) is empowered to sign this certificate on behalf of the assignee.

I hereby declare that all statements made herein of my own belief are true, and that all statements made on information and belief are believed to be true; and further, that these statements are made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment or both, under Section 1001, Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Signature

Date

Typed or printed name

Title

*Keith A. Johnson*

July 29, 2003

Keith A. Johnson

V.P. & General Counsel

A S S I G N M E N T

DTG WHEREAS, we, Douglas T. Gjerde, Paul D. Taylor and Robert M. Haefele hereinafter referred to as the assignors, residing respectively at <sup>12295</sup>~~12995~~ Woodside Drive, Saratoga, California 95070, 248 Hawthorne Avenue, Palo Alto, California 94301 and 248 Hawthorne Avenue, Palo Alto, California 94301 are the joint inventors of certain inventions or improvements for which we have made application for Letters Patent to the United States, identified as Serial No. 09/826,055, filed April 3, 2001, entitled Modifying Double Stranded DNA to Enhance Separations by Matched ION Polynucleotide Chromatography; and

WHEREAS, Transgenomic, Inc., hereinafter referred to as the assignee, of Omaha, Nebraska, a corporation of Delaware, is desirous of acquiring the entire right, title and interest in and to the said inventions or improvements and in and to the said application, and in, to and under any and all Letters Patent which may be granted on or as a result thereof in any and all countries:

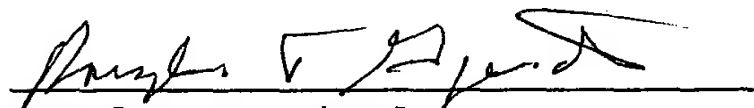
NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, we, the said assignors, have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over to said assignee, the entire right, title and interest in and to said inventions or improvements and said application and any and all continuations, divisions and renewals of and substitutes for said application, and in, to and under any and all Letters Patent which may be granted on or as a result thereof in the United States and any and all other countries, and any reissue or reissues or extension or extensions of said Letters Patent, and assign to and authorize said assignee, to file in our names applications for Letters Patent in all countries, the same to be held and enjoyed by said assignee, its successors, assigns, nominees or legal representatives, to the full end of the term or terms for which said Letters Patent respectively may be granted, reissued or extended, as fully and entirely as the same would have been held and enjoyed by us had this assignment, sale and transfer not been made.

AND we hereby covenant that we have full right to convey the entire interest herein assigned, and that we have not executed and will not execute any agreement in conflict herewith, and we further covenant and agree that we will each time request is made and without undue delay, execute and deliver all such papers as may be necessary or desirable to perfect the title to said inventions or

improvements, said application and said Letters Patent to said assignee, its successors, assigns, nominees, or legal representatives, and each of us agrees to communicate to said assignee or to its nominee all known facts respecting said inventions or improvements, said application and said Letters Patent, to testify in any legal proceedings, to sign all lawful papers to execute all disclaimers and divisional, continuing, reissue and foreign applications, to make all rightful oaths, and generally to do everything possible to aid said assignee, its successors, assigns, nominees and legal representatives to obtain and enforce for its or their own benefit proper patent protection for said inventions or improvements in any and all countries.

AND we hereby authorize and request the Commissioner of Patents and Trademarks of the United States and any official of any country or countries foreign to the United States whose duty it is to issue patents on applications as aforesaid, to issue to said assignee, as assignee of the entire right, title and interest, any and all Letters Patent for said inventions or improvements, including any and all Letters Patent of the United States which may be issued and granted on or as a result of the application aforesaid, in accordance with the terms of this assignment.

IN WITNESS WHEREOF, we have hereunto set our hands and seals.

 (L.S.)  
Douglas T. Gjerde

\_\_\_\_ (L.S.)  
Paul D. Taylor

\_\_\_\_ (L.S.)  
Robert M. Haefele

[WHERE ALL INVENTORS SIGN BEFORE THE SAME NOTARY:]

\_\_\_\_\_:

SS

COUNTY OF \_\_\_\_\_:

On this \_\_\_\_\_ day of \_\_\_\_\_, 2003, before me personally came the above named Douglas T. Gjerde, Paul D. Taylor and Robert M. Haebele to me personally known and known to me to be the same individual who executed the foregoing assignment, and who acknowledged to me that execution of the same was of those persons' own free will for the use and purposes therein set forth.

\_\_\_\_\_  
Notary Public

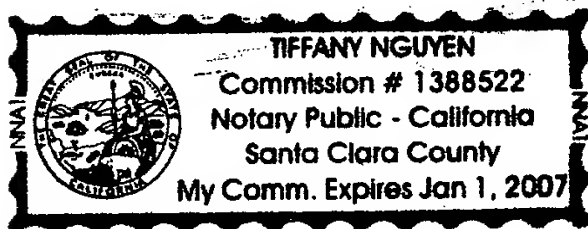
[WHERE INVENTORS SIGN BEFORE SEPARATE NOTARIES:]

State of California :

SS

COUNTY OF Santa Clara :

On this 28<sup>th</sup> day of June, 2003, before me personally came the above named Douglas T. Gjerde to me personally known and known to me to be the same individual who executed the foregoing assignment, and who acknowledged to me that execution of the same was of that person's own free will for the use and purposes therein set forth.



Tiffany Nguyen  
Notary Public

\_\_\_\_\_  
COUNTY OF \_\_\_\_\_: SS

On this \_\_\_\_\_ day of \_\_\_\_\_, 2003, before me personally came the above named Paul D. Taylor to me personally known and known to me to be the same individual who executed the foregoing assignment, and who acknowledged to me that execution of the same was of that person's own free will for the use and purposes therein set forth.

\_\_\_\_\_  
Notary Public

\_\_\_\_\_  
COUNTY OF \_\_\_\_\_: SS

On this \_\_\_\_\_ day of \_\_\_\_\_, 2003, before me personally came the above named Robert M. Haefele to me personally known and known to me to be the same individual who executed the foregoing assignment, and who acknowledged to me that execution of the same was of that person's own free will for the use and purposes therein set forth.

\_\_\_\_\_  
Notary Public



A S S I G N M E N T

WHEREAS, we, Douglas T. Gjerde, Paul D. Taylor and Robert M. Haefele hereinafter referred to as the assignors, residing respectively at 12995 Woodside Drive, Saratoga, California 95070, 248 Hawthorne Avenue, Palo Alto, California 94301 and 248 Hawthorne Avenue, Palo Alto, California 94301 are the joint inventors of certain inventions or improvements for which we have made application for Letters Patent to the United States, identified as Serial No. 09/826,055, filed April 3, 2001, entitled **Modifying Double Stranded DNA to Enhance Separations by Matched ION Polynucleotide Chromatography**; and

WHEREAS, Transgenomic, Inc., hereinafter referred to as the assignee, of Omaha, Nebraska, a corporation of Delaware, is desirous of acquiring the entire right, title and interest in and to the said inventions or improvements and in and to the said application, and in, to and under any and all Letters Patent which may be granted on or as a result thereof in any and all countries:

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, we, the said assignors, have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over to said assignee, the entire right, title and interest in and to said inventions or improvements and said application and any and all continuations, divisions and renewals of and substitutes for said application, and in, to and under any and all Letters Patent which may be granted on or as a result thereof in the United States and any and all other countries, and any reissue or reissues or extension or extensions of said Letters Patent, and assign to and authorize said assignee, to file in our names applications for Letters Patent in all countries, the same to be held and enjoyed by said assignee, its successors, assigns, nominees or legal representatives, to the full end of the term or terms for which said Letters Patent respectively may be granted, reissued or extended, as fully and entirely as the same would have been held and enjoyed by us had this assignment, sale and transfer not been made.

AND we hereby covenant that we have full right to convey the entire interest herein assigned, and that we have not executed and will not execute any agreement in conflict herewith, and we further covenant and agree that we will each time request is made and without undue delay, execute and deliver all such papers as may be necessary or desirable to perfect the title to said inventions or

improvements, said application and said Letters Patent to said assignee, its successors, assigns, nominees, or legal representatives, and each of us agrees to communicate to said assignee or to its nominee all known facts respecting said inventions or improvements, said application and said Letters Patent, to testify in any legal proceedings, to sign all lawful papers to execute all disclaimers and divisional, continuing, reissue and foreign applications, to make all rightful oaths, and generally to do everything possible to aid said assignee, its successors, assigns, nominees and legal representatives to obtain and enforce for its or their own benefit proper patent protection for said inventions or improvements in any and all countries.

AND we hereby authorize and request the Commissioner of Patents and Trademarks of the United States and any official of any country or countries foreign to the United States whose duty it is to issue patents on applications as aforesaid, to issue to said assignee, as assignee of the entire right, title and interest, any and all Letters Patent for said inventions or improvements, including any and all Letters Patent of the United States which may be issued and granted on or as a result of the application aforesaid, in accordance with the terms of this assignment.

IN WITNESS WHEREOF, we have hereunto set our hands and seals.

\_\_\_\_\_(L.S.)  
Douglas T. Gjerde

\_\_\_\_\_(L.S.)  
Paul D. Taylor

Robert M. Haefele (L.S.)  
Robert M. Haefele

[WHERE ALL INVENTORS SIGN BEFORE THE SAME NOTARY:]

\_\_\_\_\_:

SS

COUNTY OF \_\_\_\_\_:

On this \_\_\_\_\_ day of \_\_\_\_\_, 2003, before me personally came the above named Douglas T. Gjerde, Paul D. Taylor and Robert M. Haefele to me personally known and known to me to be the same individual who executed the foregoing assignment, and who acknowledged to me that execution of the same was of those persons' own free will for the use and purposes therein set forth.

\_\_\_\_\_  
Notary Public

[WHERE INVENTORS SIGN BEFORE SEPARATE NOTARIES:]

\_\_\_\_\_:

SS

COUNTY OF \_\_\_\_\_:

On this \_\_\_\_\_ day of \_\_\_\_\_, 2003, before me personally came the above named Douglas T. Gjerde to me personally known and known to me to be the same individual who executed the foregoing assignment, and who acknowledged to me that execution of the same was of that person's own free will for the use and purposes therein set forth.

\_\_\_\_\_  
Notary Public

\_\_\_\_\_  
COUNTY OF \_\_\_\_\_:

SS

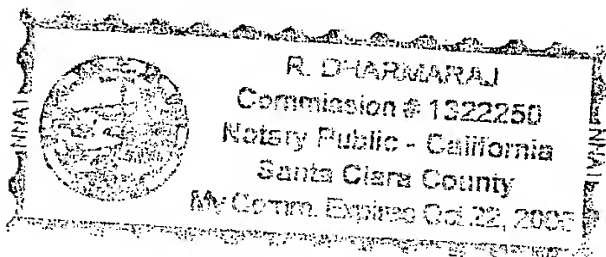
On this \_\_\_\_\_ day of \_\_\_\_\_, 2003, before me personally came the above named Paul D. Taylor to me personally known and known to me to be the same individual who executed the foregoing assignment, and who acknowledged to me that execution of the same was of that person's own free will for the use and purposes therein set forth.

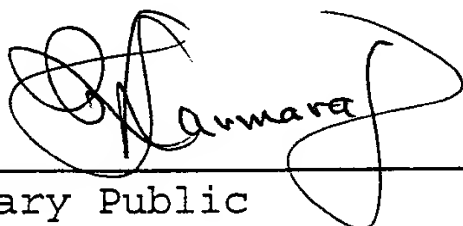
\_\_\_\_\_  
Notary Public

State of California  
COUNTY OF Santa Clara:

SS

On this 21<sup>st</sup> day of July, 2003, before me personally came the above named Robert M. Haefele to me personally known and known to me to be the same individual who executed the foregoing assignment, and who acknowledged to me that execution of the same was of that person's own free will for the use and purposes therein set forth.



  
Notary Public

A S S I G N M E N T

WHEREAS, we, Douglas T. Gjerde, Paul D. Taylor and Robert M. Haefele hereinafter referred to as the assignors, residing respectively at 12995 Woodside Drive, Saratoga, California 95070, 248 Hawthorne Avenue, Palo Alto, California 94301 and 248 Hawthorne Avenue, Palo Alto, California 94301 are the joint inventors of certain inventions or improvements for which we have made application for Letters Patent to the United States, identified as Serial No. 09/826,055, filed April 3, 2001, entitled **Modifying Double Stranded DNA to Enhance Separations by Matched ION Polynucleotide Chromatography**; and

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NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, we, the said assignors, have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over to said assignee, the entire right, title and interest in and to said inventions or improvements and said application and any and all continuations, divisions and renewals of and substitutes for said application, and in, to and under any and all Letters Patent which may be granted on or as a result thereof in the United States and any and all other countries, and any reissue or reissues or extension or extensions of said Letters Patent, and assign to and authorize said assignee, to file in our names applications for Letters Patent in all countries, the same to be held and enjoyed by said assignee, its successors, assigns, nominees or legal representatives, to the full end of the term or terms for which said Letters Patent respectively may be granted, reissued or extended, as fully and entirely as the same would have been held and enjoyed by us had this assignment, sale and transfer not been made.

AND we hereby covenant that we have full right to convey the entire interest herein assigned, and that we have not executed and will not execute any agreement in conflict herewith, and we further covenant and agree that we will each time request is made and without undue delay, execute and deliver all such papers as may be necessary or desirable to perfect the title to said inventions or

improvements, said application and said Letters Patent to said assignee, its successors, assigns, nominees, or legal representatives, and each of us agrees to communicate to said assignee or to its nominee all known facts respecting said inventions or improvements, said application and said Letters Patent, to testify in any legal proceedings, to sign all lawful papers to execute all disclaimers and divisional, continuing, reissue and foreign applications, to make all rightful oaths, and generally to do everything possible to aid said assignee, its successors, assigns, nominees and legal representatives to obtain and enforce for its or their own benefit proper patent protection for said inventions or improvements in any and all countries.

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IN WITNESS WHEREOF, we have hereunto set our hands and seals.

\_\_\_\_\_(L.S.)  
Douglas T. Gjerde

\_\_\_\_\_(L.S.)  
Paul D. Taylor

\_\_\_\_\_(L.S.)  
Robert M. Haefele

[WHERE ALL INVENTORS SIGN BEFORE THE SAME NOTARY:]

\_\_\_\_\_  
COUNTY OF \_\_\_\_\_: SS

On this \_\_\_\_\_ day of \_\_\_\_\_, 2003, before me personally came the above named Douglas T. Gjerde, Paul D. Taylor and Robert M. Haefele to me personally known and known to me to be the same individual who executed the foregoing assignment, and who acknowledged to me that execution of the same was of those persons' own free will for the use and purposes therein set forth.

\_\_\_\_\_  
Notary Public

[WHERE INVENTORS SIGN BEFORE SEPARATE NOTARIES:]

\_\_\_\_\_  
COUNTY OF \_\_\_\_\_: SS

On this \_\_\_\_\_ day of \_\_\_\_\_, 2003, before me personally came the above named Douglas T. Gjerde to me personally known and known to me to be the same individual who executed the foregoing assignment, and who acknowledged to me that execution of the same was of that person's own free will for the use and purposes therein set forth.

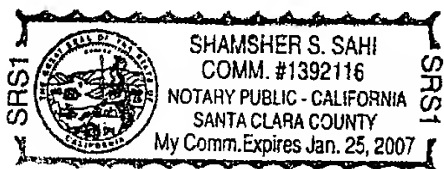
\_\_\_\_\_  
Notary Public

CALIFORNIA:

COUNTY OF SANTA CLARA:

SS

On this 17 day of JUNE, 2003, before me personally came the above named Paul D. Taylor to me personally known and known to me to be the same individual who executed the foregoing assignment, and who acknowledged to me that execution of the same was of that person's own free will for the use and purposes therein set forth.



[Signature]  
Notary Public

\_\_\_\_\_  
COUNTY OF \_\_\_\_\_:

SS

On this \_\_\_\_\_ day of \_\_\_\_\_, 2003, before me personally came the above named Robert M. Haefele to me personally known and known to me to be the same individual who executed the foregoing assignment, and who acknowledged to me that execution of the same was of that person's own free will for the use and purposes therein set forth.

\_\_\_\_\_  
Notary Public